

AMENDMENTS TO THE CLAIMS:

Please amend claims 1, 8 and 15 , as shown below.

This listing of claims will replace all prior versions and listings of claims in the
Application:

Claim 1 (currently amended): A method of testing a mask pattern, comprising the steps of:

(a) applying optical proximity-effect compensation to a first pattern to be tested and to be formed onto a mask layer, to thereby actually form a mask pattern of said mask layer;

(b) dividing said first pattern into a plurality of areas in accordance with a second pattern to be formed onto another mask layer;

(c) determining sampling points on an edge of said first pattern;

(d) determining a test standard for each of said areas;

(e) simulating a resist pattern formed on a resist by exposing said resist to a light through said mask pattern; and

(f) checking whether a dimensional gap between said first pattern and said resist pattern at each of said sampling points is within a test standard associated with an area to which each of said sampling points belongs,

wherein a test standard for a first area among said areas and a test standard for a second area among said areas are different from each other.

Claim 2 (original): The method as set forth in claim 1, wherein a N-th sampling point located in a N-th area, among said sampling points, is determined in accordance with a N-th process in said step (c) wherein N indicates an integer equal to or greater than one (N = 1, 2, 3, 4, ---), and first to N-th processes are different from one another.

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Claim 3 (original): The method as set forth in claim 1, further comprising:

dividing an edge of said first pattern into a plurality of portions, wherein said test standard is determined for each of said portions.

Claim 4 (original): The method as set forth in claim 1, wherein said first pattern is a pattern for forming a wiring layer, said second pattern is a pattern for forming a contact reaching said wiring layer, and said first area includes a third area including a contact area in which said contact makes contact with said wiring layer.

Claim 5 (original): The method as set forth in claim 4, wherein said third area is comprised of said contact area and an ambient area surrounding said contact area.

Claim 6 (original): The method as set forth in claim 1, wherein said first pattern is a pattern for forming a wiring layer including a gate of a MOS transistor, said second pattern is a pattern for forming an active area of said MOS transistor, and said first area includes a fourth area including a fifth area obtained by projecting said active area onto said first pattern.

Claim 7 (original): The method as set forth in claim 6, wherein said fourth area is comprised of said fifth area and an ambient area surrounding said fifth area.

Claim 8 (currently amended): A program on computer-readable medium for causing a computer to carry out a method of testing a mask pattern, [[steps]]wherein said method is executed by said computer in accordance with said program including the steps of:

(a) applying optical proximity-effect compensation to a first pattern to be tested and to be formed onto a mask layer, to thereby actually form a mask pattern of said mask layer;

(b) dividing said first pattern into a plurality of areas in accordance with a second pattern to be formed onto another mask layer;

(c) determining sampling points on an edge of said first pattern;

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(d) determining a test standard for each of said areas;

(e) simulating a resist pattern formed on a resist by exposing said resist to a light through said mask pattern; and

(f) checking whether a dimensional gap between said first pattern and said resist pattern at each of said sampling points is within a test standard associated with an area to which each of said sampling points belongs,

wherein a test standard for a first area among said areas and a test standard for a second area among said areas are different from each other.

Claim 9 (original): The program as set forth in claim 8, wherein a N-th sampling point located in a N-th area, among said sampling points, is determined in accordance with a N-th process in said step (c) wherein N indicates an integer equal to or greater than one ($N = 1, 2, 3, 4, \dots$), and first to N-th processes are different from one another.

Claim 10 (original): The program as set forth in claim 8, wherein said steps further include:
dividing an edge of said first pattern into a plurality of portions, wherein said test standard is determined for each of said portions.

Claim 11 (original): The program as set forth in claim 8, wherein said first pattern is a pattern for forming a wiring layer, said second pattern is a pattern for forming a contact reaching said wiring layer, and said first area includes a third area including a contact area in which said contact makes contact with said wiring layer.

Claim 12 (original): The program as set forth in claim 11, wherein said third area is comprised of said contact area and an ambient area surrounding said contact area.

Claim 13 (original): The program as set forth in claim 8, wherein said first pattern is a pattern for forming a wiring layer including a gate of a MOS transistor, said second pattern is a pattern for forming an active area of said MOS transistor, and said first area includes a fourth area including a fifth area obtained by projecting said active area onto said first pattern.

Claim 14 (original): The program as set forth in claim 13, wherein said fourth area is comprised of said fifth area and an ambient area surrounding said fifth area.

Claim 15 (currently amended): A method of forming a mask having a desired mask pattern, including the steps of :

- (a) applying optical proximity-effect compensation to a first pattern to be tested and to be formed onto a mask layer, to thereby actually form a mask pattern of said mask layer;
 - (b) dividing said first pattern into a plurality of areas in accordance with a second pattern to be formed onto another mask layer;
 - (c) determining sampling points on an edge of said first pattern;
 - (d) determining a test standard for each of said areas;
 - (e) simulating a resist pattern formed on a resist by exposing said resist to a light through said mask pattern;
 - (f) checking whether a dimensional gap between said first pattern and said resist pattern at each of said sampling points is within a test standard associated with an area to which each of said sampling points belongs; and
 - (g) transferring said mask pattern onto a mask,
- wherein a test standard for a first area among said areas and a test standard for a second area among said areas are different from each other.

Claim 16 (original): The method as set forth in claim 15, wherein a N-th sampling point located in a N-th area, among said sampling points, is determined in accordance with a N-th process in said step (c) wherein N indicates an integer equal to or greater than one ($N = 1, 2, 3, 4, \dots$), and first to N-th processes are different from one another.

Claim 17 (original): The method as set forth in claim 15, further comprising:

dividing an edge of said first pattern into a plurality of portions, wherein said test standard is determined for each of said portions.

Claim 18 (original): The method as set forth in claim 15, wherein said first pattern is a pattern for forming a wiring layer, said second pattern is a pattern for forming a contact reaching said wiring layer, and said first area includes a third area including a contact area in which said contact makes contact with said wiring layer.

Claim 19 (original): The method as set forth in claim 18, wherein said third area is comprised of said contact area and an ambient area surrounding said contact area.

Claim 20 (original): The method as set forth in claim 15, wherein said first pattern is a pattern for forming a wiring layer including a gate of a MOS transistor, said second pattern is a pattern for forming an active area of said MOS transistor, and said first area includes a fourth area including a fifth area obtained by projecting said active area onto said first pattern.